



Air-Quality Detection Module

(Model: ZP07-MP503)

User's Manual

Version:1.2

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Zhengzhou Winsen Electronics Technology Co., Ltd

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Zhengzhou Winsen Electronics Technology CO., LTD.

ZP07 Air-Quality Detection Module

Product Description

ZP07 air-quality module adopts flat surface semiconductor gas sensor. The module has good sensitivity to volatile organic gases such as formaldehyde, benzene, carbon monoxide, ammonia, hydrogen, alcohol and smoke of cigarette, essence &etc. The module has been aging, debugged, adjusted and calibrated. So it has good consistency and high sensitivity.



Features

- High sensitivity
- Low power consumption, long life
- Calibrated before shipment
- 10 seconds to 3 minutes with auto-preheating function
- Faulty auto-check, High cost-effective

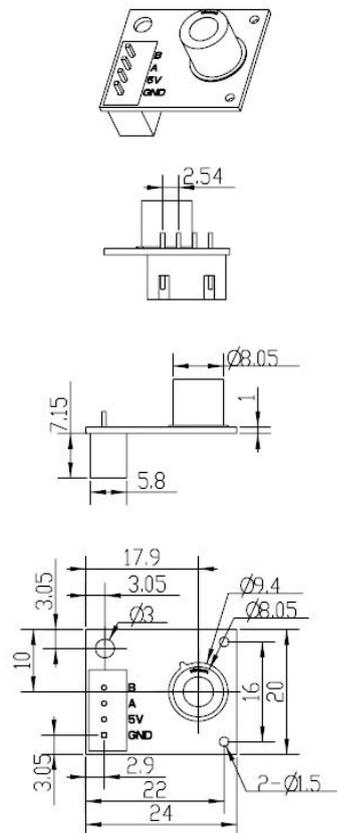
Application

Air cleaner, fresh-air system, intelligent integrated ceiling, air quality detector, ventilator, air-condition.

Technical Index

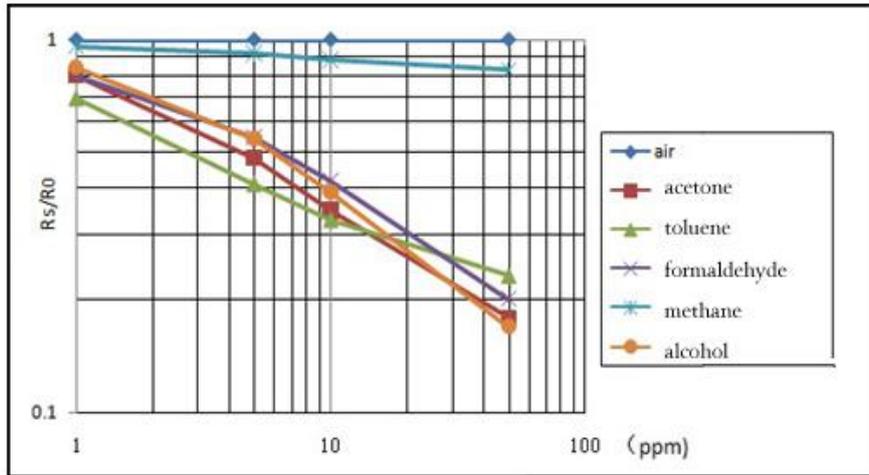
Table 1

Model No.	ZP07
Detection Gas	formaldehyde, benzene, carbon monoxide, hydrogen, alcohol, ammonia, smoke of cigarette, essence &etc.
Physical Interface	XH2.54-4P terminal sockets
Output Data	0-100 grade pollution signal
Detection range	0-5 ppm Alcohol
Working Voltage	5.0±0.2V DC (No voltage reverse connect protection)
Output Data	TTL level (200ohm protected resistance inside)
Working Current	≤60mA
Warm-up Time	≤3 min
Response Time	≤20s Alcohol
Operating Temperature	0~50℃
Operating Humidity	≤95% RH
Storage Temperature	-20~60℃
Storage Humidity	≤60% RH
Size	24×20×16mm(L×W×H)
Weight	≤ 20g
Sensitivity Attenuator	≤1%/year
Life Span	≥5 years



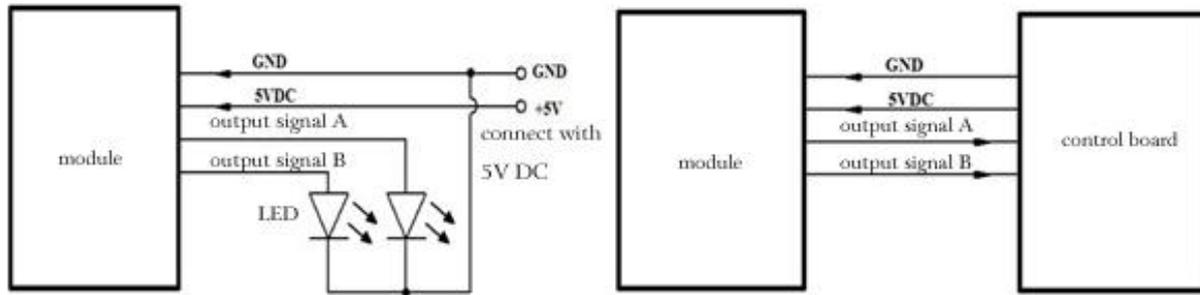
Picture 1:Module structure diagram

Sensitivity Characteristics



Picture 2: Contrast of the sensitivity in different gases

Application of schematic diagram



Picture 3: Module application diagram

Pin definition Table2.

Pin	Name	Function
1	GND	Input power -
2	5V	Input power +
3	A	Output signal A
4	B	Output signal B (reserved by factory)

A Output Signal Table3.

High ms	Low ms	Pollution grade
0	1000	0
10	990	1
20	980	2
30	970	3
40	960	4
50	950	5
⋮	⋮	⋮
⋮	⋮	⋮
970	30	97
980	20	98
990	10	99
1000	0	100

Cautions

- Please do not put the module in organic solvent (include silica gel and other cementing compound), painting, medicament, oils and fuels, high concentration gas etc.
- Please do not impact or vibrate the module seriously.
- Please warm up for 5 min before first using.
- Please do not use the module related with personal safety.
- Please do not install the module in the severe convection environment.
- Please do not put in the module in high concentration organic gas for long time.

Zhengzhou Winsen Electronics Technology Co., Ltd

Add: No.299, Jinsuo Road, National Hi-Tech Zone,
Zhengzhou 450001 China

Tel: +86-371-67169097/67169670

Fax: +86-371-60932988

E-mail: sales@winsensor.com

Website: www.winsen-sensor.com